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10/587,224	04/12/2007	Johann Magg	2004P00160WOUS	6699
46726	7590	07/26/2010	EXAMINER	
BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562				TEATERS, LINDSEY C
ART UNIT		PAPER NUMBER		
3742				
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/587,224

Filing Date: April 12, 2007

Appellant(s): MAGG ET AL.

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Andre Pallapies  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 04/28/2010 appealing from the Office action mailed 12/10/2009.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 10, 13, 14, 16, and 18-23 are pending in the application.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN"

REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

#### **(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

#### **(8) Evidence Relied Upon**

WO03/030696A1	Fanzutti et al	4-2003
5367607	Hufnagl et al	11-1994
20040009281A1	Green	1-2004
20030108343A1	Buzzi	4-2005

#### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

##### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 10, 13-14, 18-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanzutti et al (WO 03/030696 A), cited by applicant, in view of Hufnagl et al (US 5,367,607), cited by applicant, and Green (US 2004/0009281 A1).

Re claims 10, 13-14, and 18:

Fanzutti et al teaches a coffee machine (10) for preparing coffee using coffee pads, which comprises a continuous heater (18) provided with a water-guiding pipe (140) that is thermally connected to two heating rods (142, 144) provided at opposite sides of the pipe (fig 4) by means of contact surfaces, a pump (54) for transporting water through the continuous heater, the pipe has ends (136, 138) into which hose-like flexible tube connecting pieces (132, 134) of a water supply and exit can be inserted, securing means for securing the continuous heater on a housing of the coffee machine (connecting pieces connection to water supply is a securing means as well as components 120, 122, see fig 2), the pipe and the two heating rods are held together by a sleeve (120, 122), a temperature sensor (128) is disposed adjacent the sleeve, and holders (protrusions from 120, 122, or connecting pieces themselves) configured to receive additional components of the coffee machine.

Fanzutti et al fails to teach that the contact surfaces between the pipe and the heating rods are flat. Hufnagl et al, however, teaches a beverage machine utilizing a heating rod (7) and a water

transfer tube (6) wherein the contacting surface of the heating rod is flattened and solder (24) forms a flat contact surface with the water transfer tube (col. 4, lines 31-35, fig 1).

In view of Hufnagl et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a flat contact surface between the pipe and heating rods, taught by Fanzutti et al. The benefit of having a flattened contact surface is to maximize heat transfer where a two rounded surfaces or a rounded surface and a flat surface mating would not. Fanzutti et al teaches a perfectly mated, rounded contact surface, which conducts heat thoroughly, and fulfills the benefits of having a flat contacting surface equally well if not better, as more of the surface of the pipe may be contacted by the means shown in Fanzutti et al.

Fanzutti et al, modified by Hufnagl et al, fails to teach that the connecting pieces are made out of plastic. Green, however, teaches a connector piece (185, figure 1) of a hot beverage machine (100, figure 1) made of plastic (paragraph [0025]).

In view of Green's teachings, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize connecting pieces, taught by Fanzutti et al, as modified by Hufnagl et al, made of plastic. Plastic is an economical, flexible, high temperature resistant, and non-corrosive option for connecting pieces of coffee machines, which serves as an insulating material from the continuous heater.

Re claims 19-21 and 23:

Fanzutti et al teaches a coffee machine (10) for preparing coffee using coffee pads, the coffee machine comprising a continuous heater (18) provided with a water-guiding pipe (140), two heating rods (142, 144) provided on opposite sides of the pipe (fig 4) and thermally connected to the pipe by corresponding contact surfaces, a pump (54) cooperable with the continuous heater and transporting water through the continuous heater, wherein the pipe has ends (136, 138) into which hose-like flexible tube connecting pieces (132, 134) are inserted and securing means for securing the continuous heater on a housing of the coffee machine (connecting pieces connection to water supply is a securing means as well as components 120, 122, see fig 2), the pipe and the two heating rods are held together by a sleeve (120, 122), a temperature sensor (128) is disposed adjacent the sleeve, and holders (protrusions from 120, 122, or connecting pieces themselves) configured to receive additional components of the coffee machine.

Fanzutti et al fails to teach that the at least one contact surface between the pipe and the heating rods is flat. Hufnagl et al, however, teaches a beverage machine utilizing a heating rod (7) and a water transfer tube (6) wherein the contacting surface of the heating rod is flattened and solder (24) forms a flat contact surface with the water transfer tube (col. 4, lines 31-35, fig 1).

In view of Hufnagl et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a flat contact surface between the pipe and heating rods, taught by Fanzutti et al. The benefit of having a flattened contact surface is to maximize heat transfer where a two rounded surfaces or a rounded surface and a flat surface mating would not. Fanzutti et al teaches a perfectly mated, rounded contact surface, which conducts heat

thoroughly, and fulfills the benefits of having a flat contacting surface equally well if not better, as more of the surface of the pipe may be contacted by the means shown in Fanzutti et al.

Fanzutti et al, modified by Hufnagl et al, fails to teach that the connecting pieces are made out of plastic. Green, however, teaches a connector piece (185, figure 1) of a hot beverage machine (100, figure 1) made of plastic (paragraph [0025]).

In view of Green's teachings, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize connecting pieces, taught by Fanzutti et al, as modified by Hufnagl et al, made of plastic. Plastic is an economical, flexible, high temperature resistant, and non-corrosive option for connecting pieces of coffee machines, which serves as an insulating material from the continuous heater.

5. Claims 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanzutti et al (WO 03/030696 A), cited by applicant, in view of Hufnagl et al (US 5,367,607), cited by applicant, and Green (US 2004/0009281 A1), as applied to claims 10 and 19 above, and further in view of Buzzi (US 2003/0108343 A1).

Fanzutti et al, modified by Hufnagl et al and Green discloses the claimed invention as set forth above except that the connecting pieces are provided with seals. Buzzi, however, teaches inlet and outlet connectors (11', 12', figure 2A) provided with seals (paragraph [0055], see figure 2A).

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In view of Buzzi's teachings, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize connecting pieces, taught by Fanzutti et al, as modified by Hufnagl et al and Green, that are provided with seals. It is generally appreciated in the art that connecting pieces are provided with seals, because they are used to connect lines of flowing gas or liquids. It is desirable to form air or water-tight seals such that the medium passing through does not leak.

## **(10) Response to Argument**

Applicant argues on pages 8 and 9 of the appeal brief that neither Fanzutti et al nor Hufnagl et al attempt to flatten the surface of the water pipe. Fanzutti et al is never purported to teach flat contact surfaces between the water pipe and heating rods, which is why the addition of Hufnagl is introduced. The water pipe 6 of Hufnagl et al, seen in figure 1 below, has a contact surface with a flattened heating rod (3), the surface of the water pipe which is also clearly flattened through the use of solder. The connection between the two elements is flat. Examiner interprets claim 10 so that "a water-guiding pipe that is thermally connected to two heating rods provided at opposite sides of the pipe by *means of contact surfaces*" corresponds to "*all of the contact surfaces* of the pipe and the heating rods" though the claims does not read all of the contact surfaces between the pipe and the heating rods. Applicant further argues on page 11 that Hufnagl et al only teaches the use of a single heating element. Fanzutti et al, however, clearly teaches two heating rods 144 surrounding a water pipe 140 on opposite sides. Hufnagl et al is merely used to show the flattened connection between a heating rod and a water pipe, despite the number of heating elements present.

Fig. 1

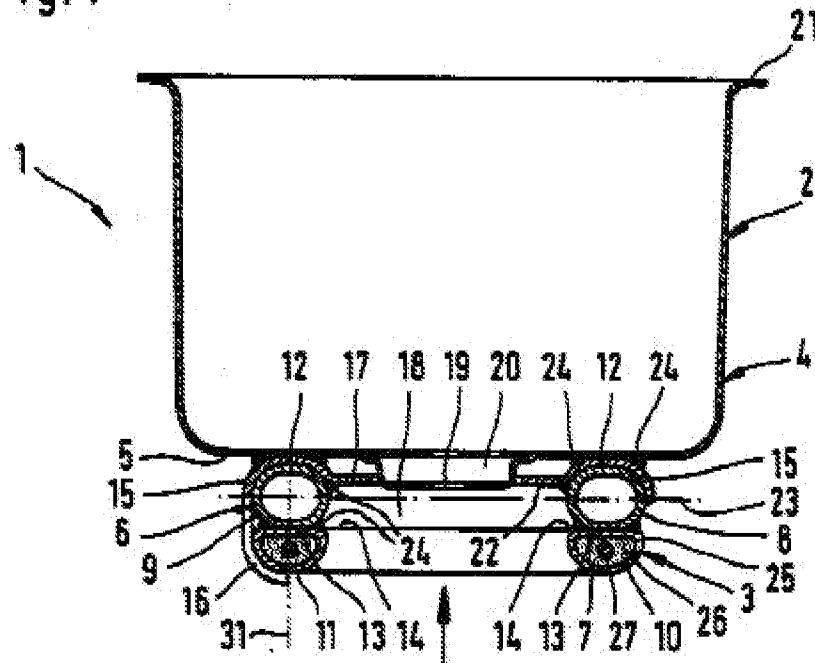


Fig 1. Hufnagl et al reference pictorial of water pipe to heating rod connection.

Applicant argues on page 10 that although the Green reference teaches the use of plastic hose connectors, that the hose connectors in Green are not subjected to any significant heat as from a heating element, and therefore, that one of ordinary skill in the art would not have found it obvious to make the material substitution for fear that heating elements would melt or significantly damage the plastic connector. The use of plastics in high temperature applications is well known in this art and many others. In addition to teaching the connector 185 made of plastic, Green also teaches other components and connectors subjected to heat from heating elements made out of plastic, see for example paragraph [0031] of Green, "The nozzle body 240 may be made of stainless steel, aluminum, plastic, or any other substantially non-corrosive

material." Examiner believes that the incorporation of the Green reference clearly demonstrates that the use of plastic connectors is well known regardless of their proximity to heating elements.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Lindsey C. Teaters/

Patent Examiner, AU 3742

Conferees:

/TU B HOANG/

Supervisory Patent Examiner, Art Unit 3742

/Henry Yuen/

Supervisory Patent Examiner, TC 3700